SUZUKI RE-5

FITTING-UP AND PRE-DELIVERY PROCEDURES UPON UNPACKING

To : SUZUKI RE5 SERVICE SHOPS

Upon unpacking the shipping crate, you will find the RE5 motorcycle partially dismantled. This dismantling, effected at our RE5 factory at the time of shipment for product protection and shipping volume reduction, is calculated to assure easy fitting up for you in making the motorcycle take its complete shape.

You are requested to carry out the fitting-up job and to harness and trim the motorcycle into ready-to-drive state according to the fitting-up procedure and pre-delivery service instructions herein contained and by referring to the RE5 service manual in regard to details.

Please see to it that each RE5 motorcycle will take up a good appearance to reflect the best design and workmanship and materials that are in this new SUZUKI product and will pass in that state into the hand of the original purchaser.

SUZUKI MOTOR CO., LTD.
International Service Department

CONTENTS

1. FITTING-UP PROCEDURE

1-1. FRONT END
- 1-1-1. Speedometer assembly 3
- 1-1-2. Handlebars 3
- 1-1-3. Head lamp and turn signals 4
- 1-1-4. Front fender 5
- 1-1-5. Front wheel 5

1-2. RIGHT-SIDE SECTION
- 1-2-1. Muffler 6

1-3. LEFT-SIDE SECTION
- 1-3-1. Muffler 7
- 1-3-2. Seat 7

1-4. REAR END
- 1-4-1. Tail lamp 7
- 1-4-2. Rear fender 8
- 1-4-3. Turn signals 8

2. PRE-DELIVERY SERVICING

2-1. THROTTLE CABLES
- 2-1-1. Settling the cable 10
- 2-1-2. Port valve timing adjustment 10
- 2-1-3. Throttle cable play 11
- 2-1-4. Metering oil pump control cable 11

2-2. ENGINE OIL
- 2-2-1. Recommended oil and filling points 12
- 2-2-2. Engine oil quantity 12

2-3. TRANSMISSION OIL 13

2-4. BATTERY 13

2-5. ENGINE COOLANT 13

2-6. ELECTRICAL EQUIPMENT
- 2-6-1. Cooling fan 14
- 2-6-2. Speedometer lamps 14
- 2-6-3. Lights 14
- 2-6-4. Charging system 15

2-7. ENGINE
- 2-7-1. Single-lobe cam point 15

2-8. . ADJUSTMENT OF CONTROLS
- 2-8-1. Clutch lever 16
- 2-8-2. Brake lever and brake fluid 16
- 2-8-3. Brake pedal 16

1. FITTING-UP PROCEDURE

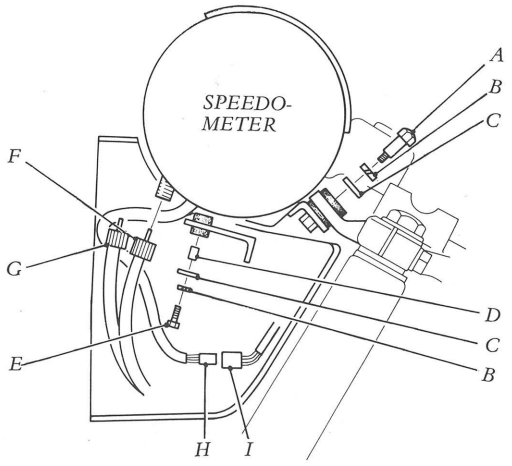
1-1. FRONT END

1-1-1. Speedometer assembly

Install the speedometer assembly as shown. The head lamp must be removed to permit this installation.

Identification of parts

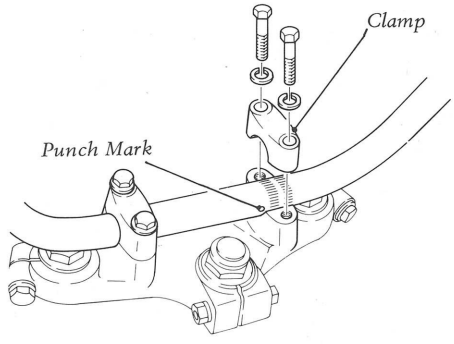
A : *8-mm bolt*
B : *spring washer*
C : *plain washer*
D : *spacer*
E : *6-mm bolt*
F : *speedometer cable (left side)*
G : *tachometer cable (right side)*
H : *electrical wire coupler (male)*
I : *electrical wire coupler (female)*



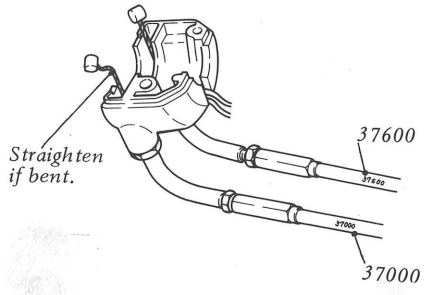
NOTES: There are a number of couplers, some on the cords extending from the speedometer and the others for mating with the speedometer cord couplers. These couplers are identified by colors for correct mating. Coupler "I" is colored; coupler "H" is identified by the color of the tape wrapped around its cord. Couplers with like colors are to be matched. If the color of coupler "I" is white, coupler "H" has no tape.

1-1-2. Handlebars

Fittings:
Position the handlebars in place, bringing its punch mark flush to the mating face of the saddle to which the clamp is to be fastened as shown. Tightening torque for the securing screws is 120 ~ 200 kg-cm (8.7 ~ 14.5 ft-lb).



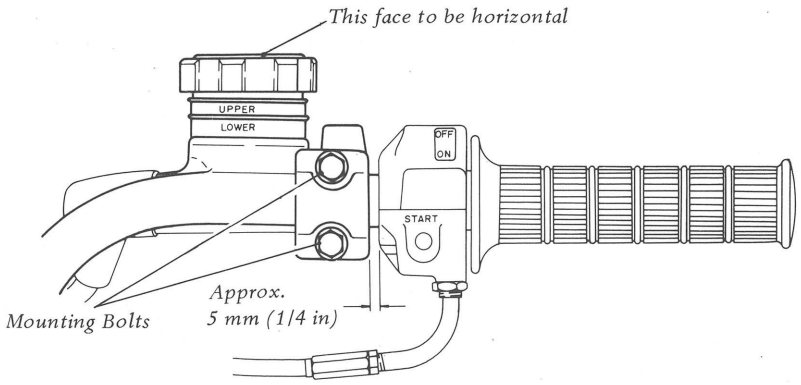
Throttle cables:
Connect the two throttle cables to the lower half of the right-side handle switch box. These cables are given numbers: 37000 and 37600. Secure the 37000 cable to the side opposite the starter button, and the 37600 cable to the starter button side.



The cable termination may be found distorted; if so, straighten the end. Then, secure the switch box and throttle grip together to the handlebar. If some difficulty is experienced in fitting the switch to the handlebar because of the play of either cable being too small, increase the play by using the two throttle cable adjusters at the carburetor and port valve.

Wiring:
Make electrical connections on the wires extending from the handlebar switch, at the couplers which are inside the head lamp housing. The method explained in 1-1-1 applies to these connections.

Brake master cylinder:
Mount the brake master cylinder as shown. Be sure to secure a clearance of about 5 mm between switch box and master cylinder, and to position the cylinder so that the top of the reservoir cap becomes level. Tightening torque for the mounting bolts is: 50 ~ 80 kg-cm (3.6 ~ 5.8 ft-lb).

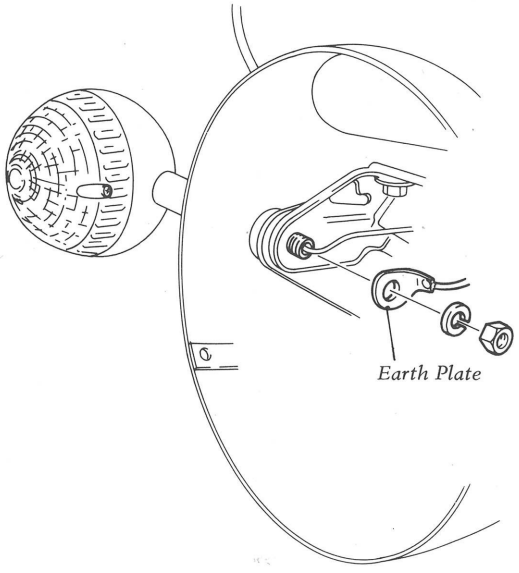


1-1-3. Head lamp and turn signals

Fit the turn signal lamp earth plate, as shown, at each side, and install the lamp.

The two turn signal lamps, right and left are identical but must be discriminated for wiring convenience. The right-hand lamp has its lead wire end painted light green for connection with the light green wire. The counterpart of the left-hand lamp connects to the black wire.

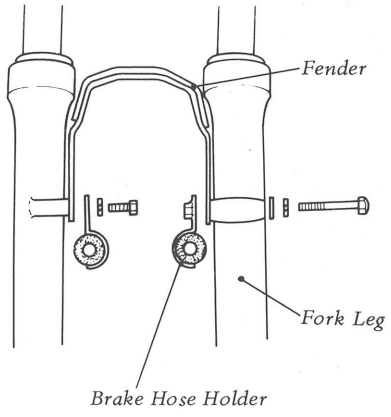
The two turn signal lamps having been installed, mount the head lamp.



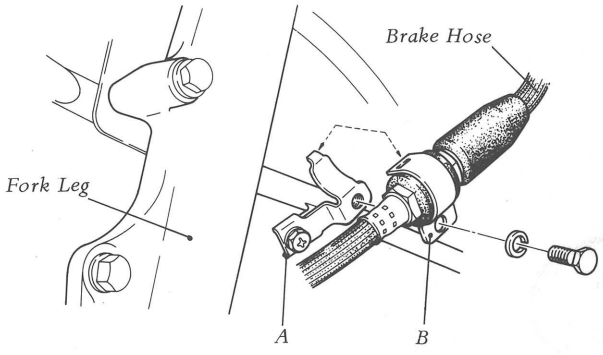
1-1-4. Front fender

Fittings:
Install the front fender by referring to the illustration. Note that each side of the fender comes between front fork and brake hose holder at the securing portion.

There are four mounting bolts, of which one is longer than the others. The long bolt goes through left fork leg. Have these bolts finger-tight; they are to be tightened fully later.

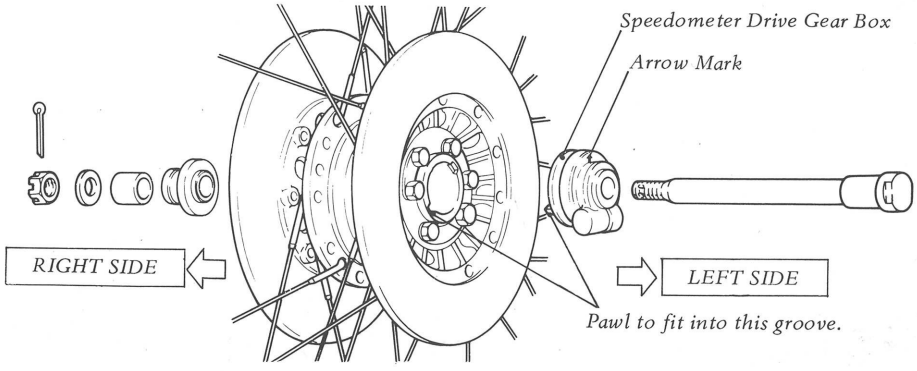


Brake hose connector holder:
Engage the holder plate "A" and plate "B" by inserting the tongue into the hole, and fasten together the bottom ends of the plates to grip the hose. Secure the hose connection to the front fender stay.



1-1-5. Front wheel

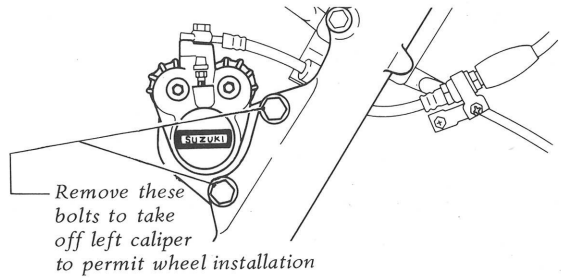
Front axle:
Remove the front axle from the front fork. Secure the axle to the front wheel as shown below, making sure that the pawl extending from the speedometer drive gear box (indicated) fits snugly into the groove provided in the wheel hub.



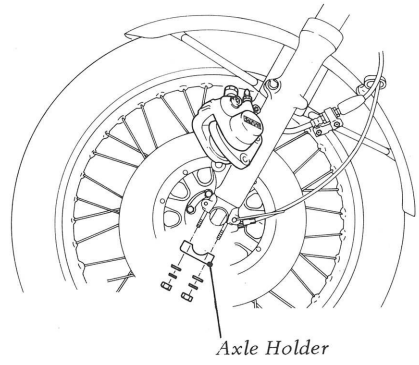
Before mounting the wheel assembly, be sure to tighten the axle to the specification torque, which is 360~ 520 kg-cm (26.0 ~ 37.6 ft-lb), and lock the nut by inserting the cotter pin.

Front wheel assembly:
The brake calipers are in place, with the brake hoses connected to them.

In order to permit the front wheel assembly to be installed, the caliper on left side must be removed from the front fork. Remove this caliper with the brake hose jointed to it.



Install the front wheel assembly as follows:
Remove the axle holders from the bottom ends of the front fork; bring in the wheel assembly, fitting the axle to the fork ends; and put on and secure the holders to the fork ends, with the wheel so positioned that the arrow mark on the speedometer drive gear box will point straight upward.



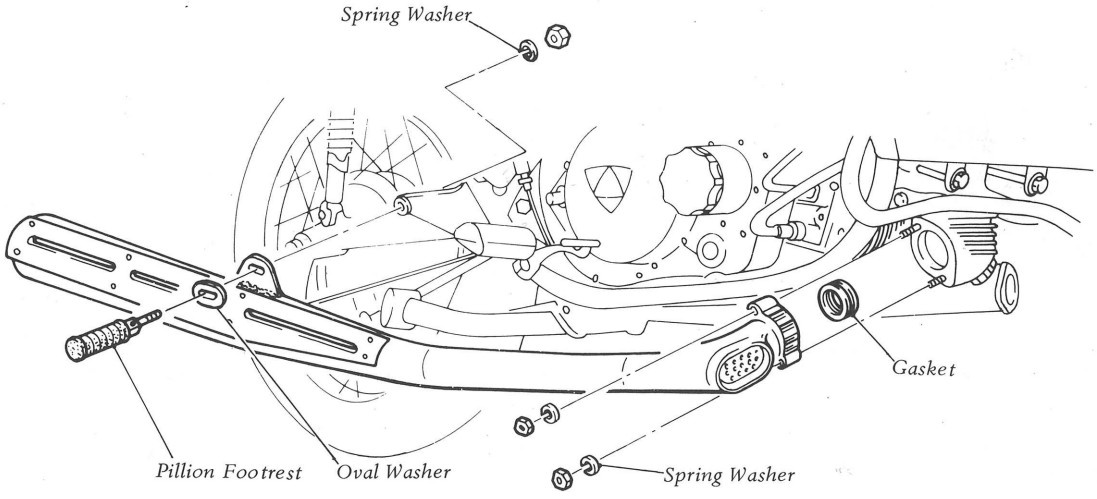
After securing the axle holders tight, restore the brake caliper and tighten the mounting bolts of the caliper and fender. Be sure to adhere to the following torque specifications:

Axle holder	*150 ~ 250 kg-cm*	*(10.8 ~ 18.1 ft-lb)*
Brake caliper	*250 ~ 400 kg-cm*	*(18 ~ 29 ft-lb)*
Front fender	*90 ~ 140 kg-cm*	*(6.5 ~ 10.0 ft-lb)*

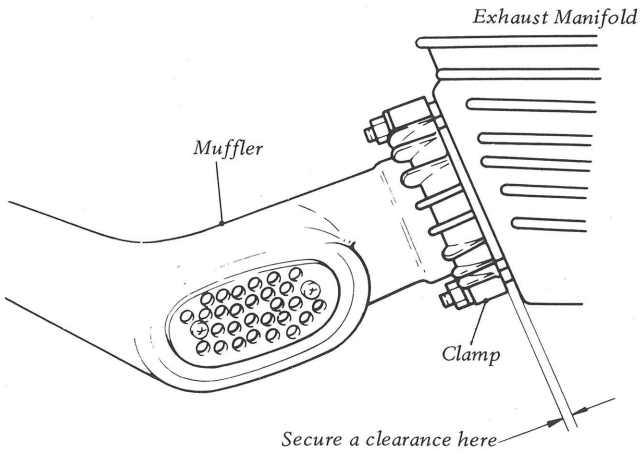
1-2. RIGHT-SIDE SECTION

1-2-1. Muffler

Install the muffler by referring to the following two illustrations:



With the muffler secured to the exhaust manifold, there should be a small clearance between the clamp and the manifold, as shown. This clearance can be obtained by properly positioning the clamp on the muffler before fitting the muffler to the manifold. The clamp is screwed onto the muffler and can therefore be adjusted.



NOTE: The muffler is held in place by fastening it at two places: at the exhaust manifold and at the pillion footrest. So that the muffler-to-manifold joint will not develop any gas leakage, it is necessary to tighten this joint before tightening at the pillion footrest. Be careful not to reverse this sequence.

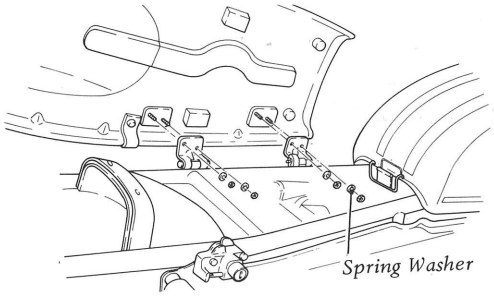
1-3. LEFT-SIDE SECTION

1-3-1. Muffler

The muffler on the left side will be found in place, as held to the chassis at the pillion footrest. Secure the muffler to the exhaust manifold in the manner described for the other muffler on the right side.

1-3-2. Seat

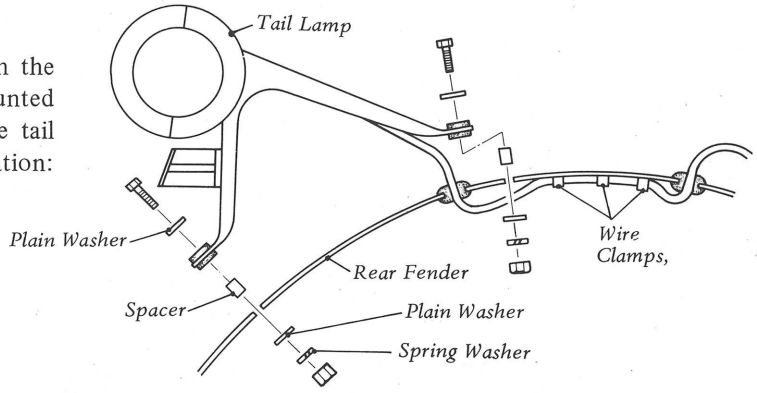
Hinges will be found on the frame, as shown. Put on the seat and fasten it to these hinges.



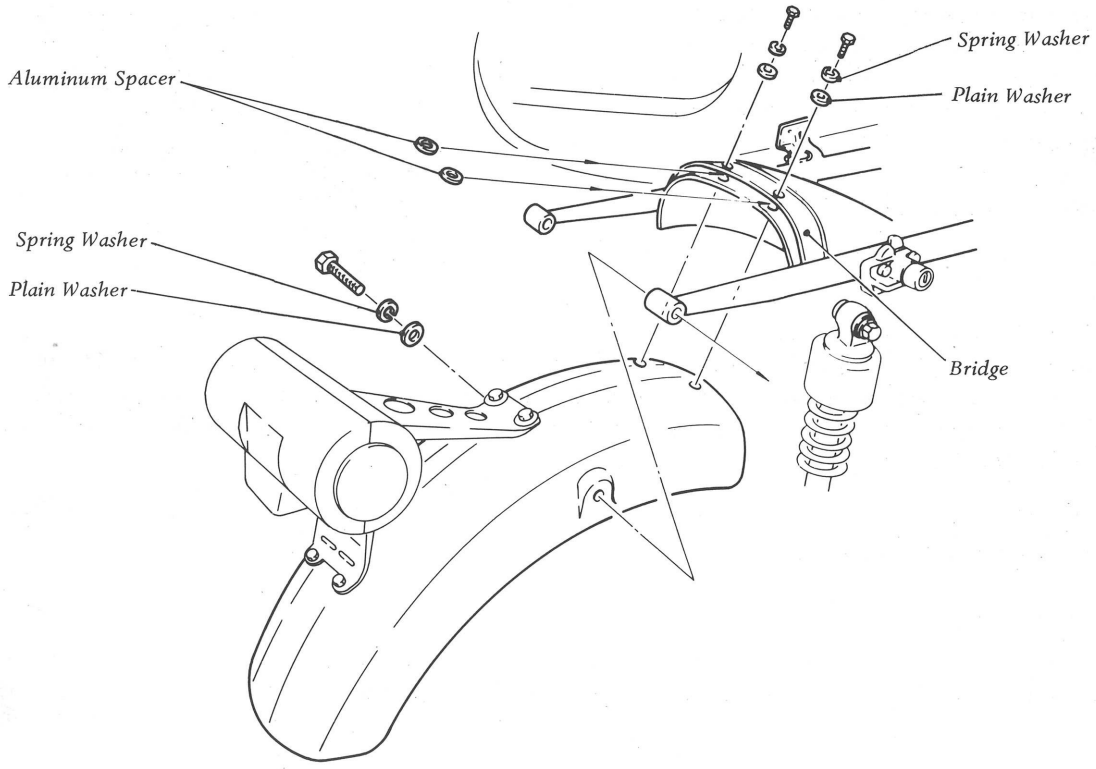
1-4. REAR END

1-4-1. Tail lamp

The tail lamp takes its position on the rear fender before this fender is mounted on the frame. How to install the tail lamp is explained in this illustration:



1-4-2. Rear fender

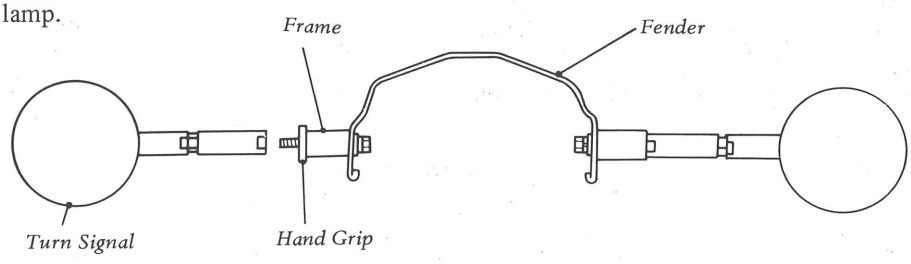


Fittings:
Be sure to install the two aluminum spacers between the bridge and the plastic fender. Without these spacers, the plastic fender (which is in place as secured to the frame) may suffer damage.

Wiring:
Be sure to pass the tail lamp cord through the small clearance between frame bridge and fender.

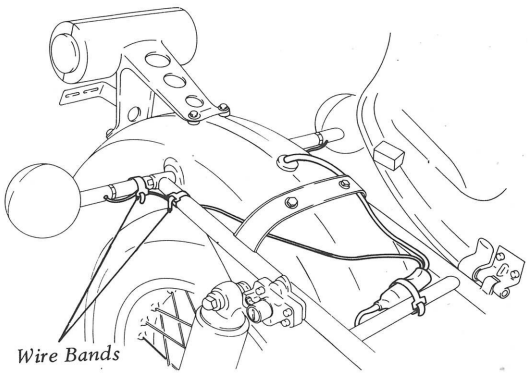
1-4-3. Turn signals

Fittings:
Secure the turn signal lamps and the fender together to the frame, as shown. Note that the hand grip takes its place on the holder of left lamp.



Wiring:
The two turn signal lamps are identical but must be discriminated because their electric wires are to be connected to specific lines identified by colors. The end of the wire extending from the right-hand lamp is painted light green, and this wire is to be connected to the light green line.

The wire from the left-hand lamp has no color marking; its end is to be connected to the black line.


Wire Bands

Route the electrical lines as shown, and put on the two wire bands to prevent the wire from sagging. This applies to both wires, one from the left-hand and the other from the right-hand lamp.

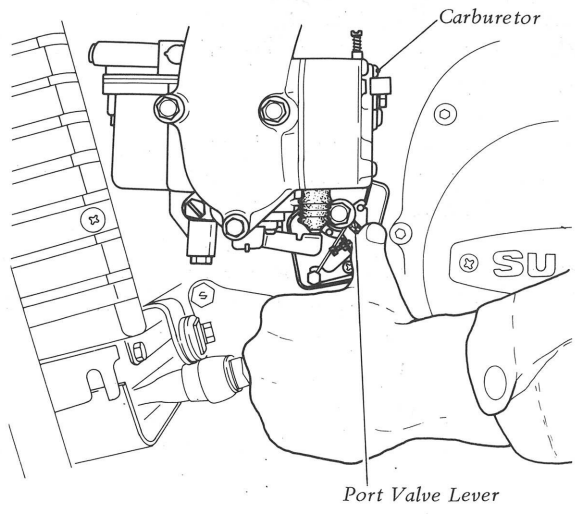
2. PRE-DELIVERY SERVICING

2-1. THROTTLE CABLES

2-1-1. Settling the cable

The possibility of the inner and outer cables getting forcibly pulled or otherwise strained during the fitting-up work must be reckoned with. Such a pull or strain would improperly position the cable ends and, if the motorcycle is placed in service with the cable ends so positioned, the cables and other related parts would shift from their correct positions in the course of service to result in a poor throttle control.

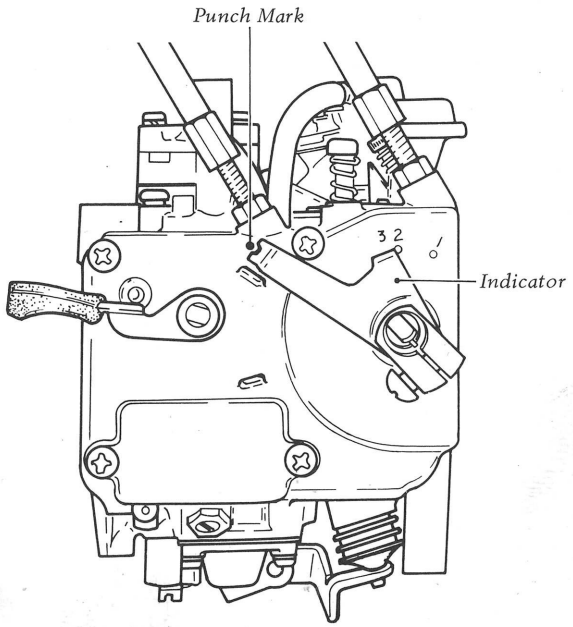
With the cable ends improperly positioned, the initial cable adjustment effected during fitting-up would be lost soon. To forestall this possibility, be sure to settle the cables into relaxed condition before making the initial adjustment. How to settle the cables is illustrated.



Put your thumb to the port valve lever under the carburetor, and turn the throttle grip two or three times rather forcibly while restraining the port valve lever.

2-1-2. Port valve timing adjustment

"Timing" here refers to a stroke of turning movement and denotes a certain angular position within this stroke.
Specifically, the turning movement is that of the special indicator, which is to be mounted on the carburetor as shown; the angular position is where the port valve lever begins to move as the throttle grip is turned upward.

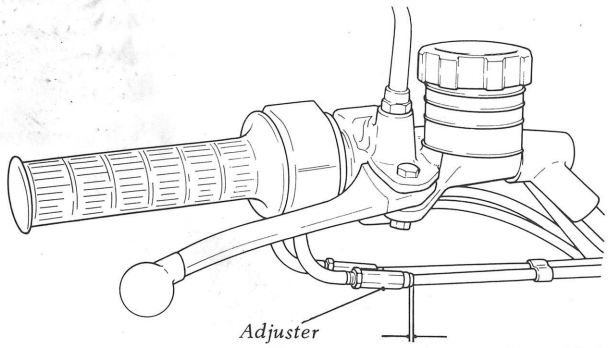


With the indicator installed as prescribed (RE5 Service Manual P. 152), turn the grip slowly. This causes the indicator to turn. See if the port valve lever starts moving just when the long-arm pointer of the indicator reaches the punch mark. If it does, the "timing" is correct. If not, increase or decrease the cable play on pull side for carburetor or port valve.

If the punch mark is absent, go by the marked lines "A" and "B". In this case, position the indicator to index its long-arm pointer to the line "A" by turning the throttle grip. Then turn the grip upward rather slowly to "full throttle" position. The long-arm pointer should come to the line "B" when the grip has come to that position; if the pointer does not reach "B", it means that the throttle cable play is excessive or that the turning stroke of the grip is not enough.

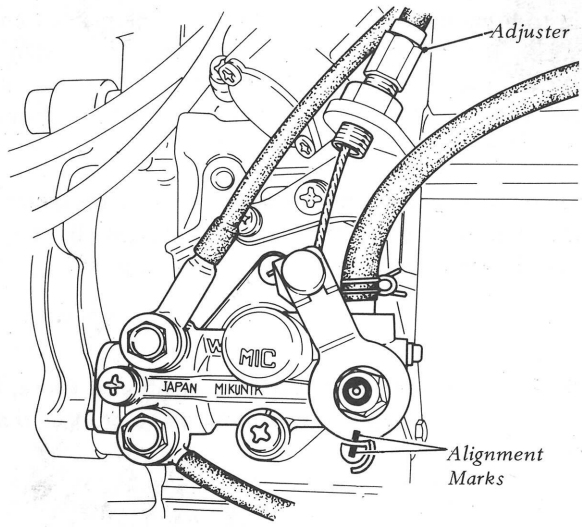
2-1-3. Throttle cable play

Check to be sure that the front throttle cable (on pull side) has a play of about 1 mm. This play can be adjusted by means of the adjuster indicated in the illustration.



2-1-4. Metering oil pump control cable

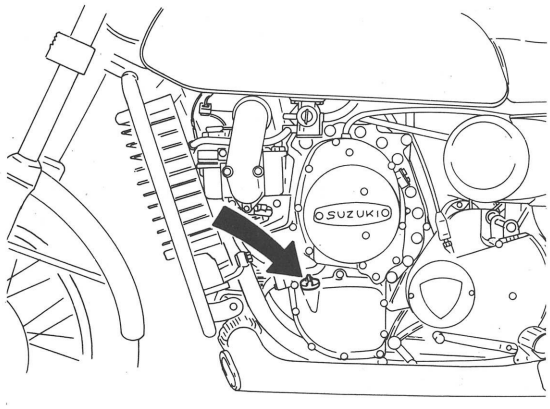
This cable is interconnected to the throttle cable. After making throttle cable adjustments, be sure to adjust this cable too. With this cable correctly adjusted, the alignment marks will line up, as shown, when the throttle valve moves to its full-open position. Reposition the adjuster, as necessary.



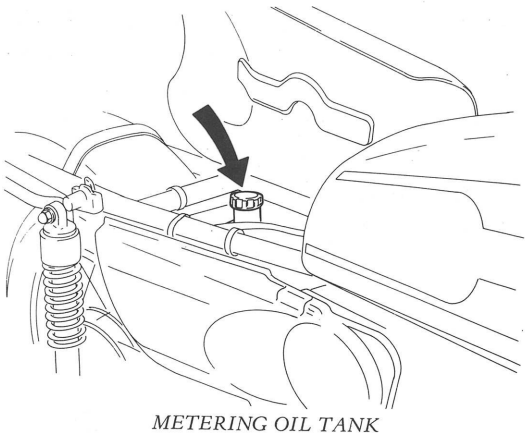
2-2. ENGINE OIL

2-2-1. Recommended oil and filling points

Be sure to use the Suzuki RE Oil or its recommended equivalent. There are two filling points, one for oil sump and the other for metering oil tank. Be sure to use the same oil in filling through these points.



OIL SUMP



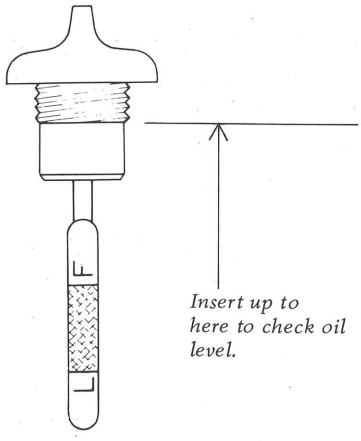
METERING OIL TANK

2-2-2. Engine oil quantity

Metering oil tank:
It takes 1.7 litres (3.6/3.0 US/Imp. pt.) to fill up this tank.

Oil sump:
The engine oil sump is to be filled up in two steps. First, fill in to bring the oil surface to the "F" line marked on the dip stick. Run the engine about half a minute and shut it down for a pause of at least a minute. After this pause, check the oil level: if the oil is down below "F", refill to bring the oil up to this mark.

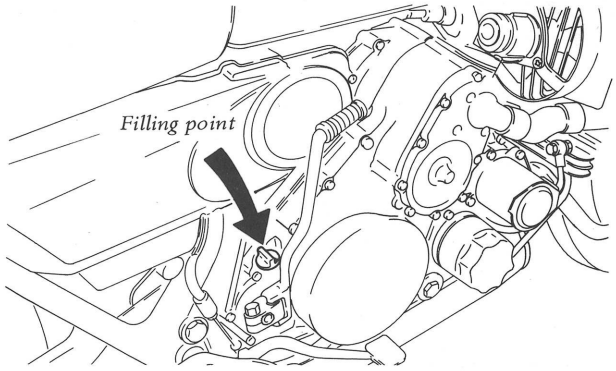
Do not run in the dip stick when checking the oil level; insert it straight into the hole as far as it will go in. Be sure that the motorcycle is standing erect by its main prop.



NOTE: The half-minute running, mentioned above, is an idling run. Never rev up the engine at this time. Revving-up will churn the oil to produce bubbles and deceive you in level checking.

2-3. TRANSMISSION OIL

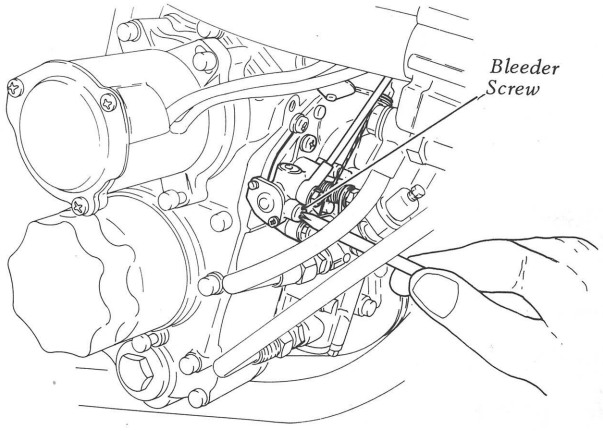
Pour into the transmission 1600 cc of the Suzuki Transmission Oil or an SAE 20W/40 motor oil. Be sure to use a graduated measuring beaker in handling this oil. The filler is indicated by the arrow in this illustration.



2-4. METERING OIL LINE AIR BLEEDING

Loosen the bleeder screw by turning it three rotations to let the oil leak out. The leaking oil may contain air bubbles. Just when bubbles disappear, tighten the bleeder screw.

This is a precautionary step, and is necessary because, during transit, some air could enter the metering oil line.



2-5. BATTERY

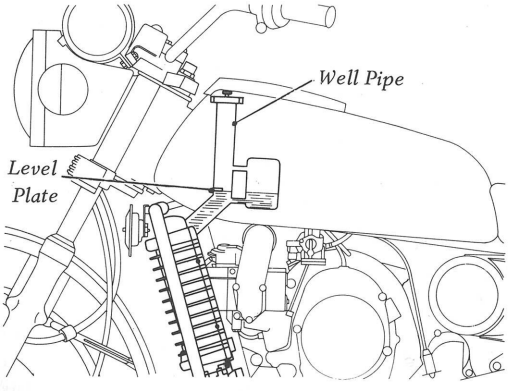
Prepare a dilute sulfuric acid with a specific gravity of 1.280 (as corrected to 20°C). Fill up each cell of the battery to the maximum level line. Give the battery an initial charge at a rate of 1.5 amperes for 20 hours.

This charging operation is to be carried out with the battery taken down. Leave the gas vent tube in the machine, disconnecting it from the battery.

2-5. ENGINE COOLANT

The RE5 motorcycle is shipped with its engine cooling system filled with the coolant. All you have to do is just check the level and replenish as necessary before delivery to the purchaser.

To check the level, remove the radiator filler cap and look into the filler well. You can see the level plate. Be sure that the coolant is up to this plate.



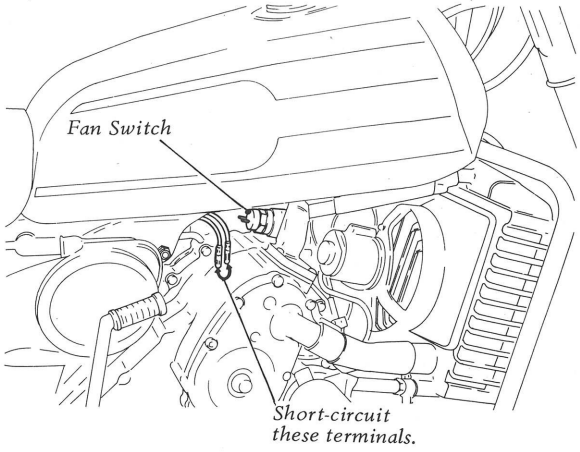
To replenish, prepare a 50%-to-50% mixture of GOLDEN CRUISER #1200 and distilled water and fill it in through the filler.

2-6. ELECTRICAL EQUIPMENT

2-6-1. Cooling fan

This fan goes into action when the engine temperature rises to a certain level. Just check to see that the fan is in operable condition by manually completing its circuit. The method is very simple, and consists of the following steps:

Disconnect the two lead wires from the fan switch and short-circuit the disconnected lead wires, as shown. Under this condition, turn the ignition switch to "CHECK" and to "ON" position. This should set the fan in operation, for each of these two positions of the ignition switch.



There is no need of discriminating the two lead wires for polarity. You may reconnect these wires to the switch either way.

2-6-2. Speedometer lamps

Pilot lamps in the speedometer unit are arranged in this order:

FUEL ○ OIL TANK ○ OIL P. ○ NEUTRAL ○ TURN ○ HIGH BEAM ○

Fuel and oil tank lamps:
Check to see that these lamps come on when the ignition switch is moved to "CHECK" position (first position). Failure to come on means that either the bulb is blown off or the lamp wire is open-circuited.

Move the ignition switch to "ON" position (second position) to see if these lamps go off; if not, it means that there is not enough fuel in the fuel tank or that the oil is low in the metering oil tank.

Oil pressure lamp:
With the engine shut down, turning the ignition switch to the first and then to the second position should cause this lamp to come on. As the engine starts up, the lamp should go off.

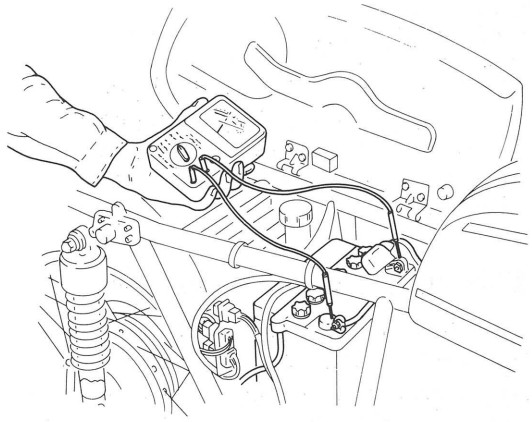
Neutral, turn and high-beam lamps:
These lamps behave in the same way as their counterparts in other Suzuki motorcycles. The only difference is that you can check these lamps by turning the ignition switch to "CHECK" position. The lamps come on when the switch is moved to this position.

2-6-3. Lights

The lights are to be checked as in other Suzuki motorcycles. In the RE5, however, there is no need of turning the ignition switch to "ON" position: with this switch in "CHECK" position, all lights but the tail lamp come on when their switches are operated respectively.

2-6-4. Charging system

Check the charging system for operation by using a voltmeter, as shown. Note that the voltmeter is hooked to the battery. Under this condition, start up the engine. As the engine starts running, the voltmeter indication will rise slightly. Pick up speed gradually to about 3000 rpm to see if the voltmeter indicates a maximum voltage of 13.5 to 14.5 volts; if it does, then the charging system is in sound condition.

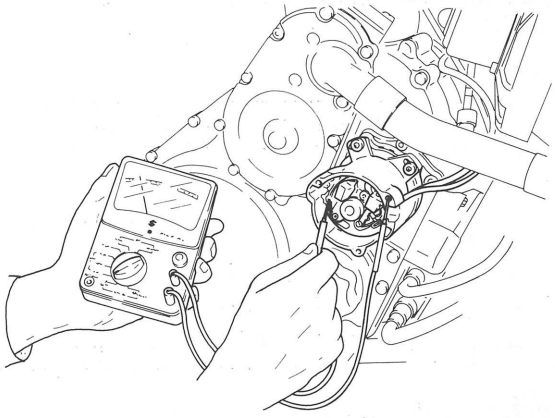


2-7. ENGINE

2-7-1. Single-lobe cam point

Whether the ignition system is in good condition is to be checked by sensing the voltage variation at the single-lobe cam point of the contact breaker.
The method is as follows:

Connect the positive (+) lead of the voltmeter to the left point in the contact breaker, and ground the voltmeter negative (–) lead, as shown. Under this condition, start up the engine and run it in three successive states: 1) idling, 2) acceleration up to about 4500 rpm, and 3) deceleration from 4500 rpm by twisting back the throttle grip all the way. If the indicating hand of the voltmeter behaves as described below for these state changes, then the ignition system is in sound condition:



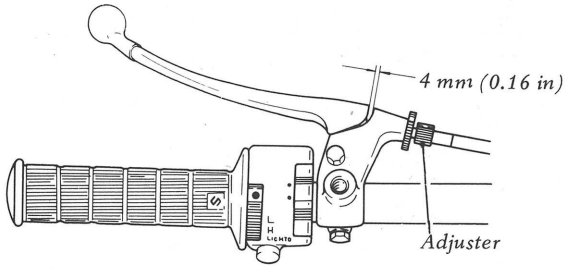
1) During idling ..... Indicating hand does not vacillate.
2) Acceleration to 4500 rpm ..... Indicating hand does not vacillate.
3) Quick deceleration from 4500 rpm ..... Indicating hand vacillates until the speed falls to about 1700 rpm, after which it returns to zero and remains there till idling speed is reached.

NOTE: If the indicating hand does not behave the way described for state 3), the system is in faulty condition and may cause the motorcycle to "surge" during deceleration.

2-8. ADJUSTMENT OF CONTROLS

2-8-1. Clutch lever

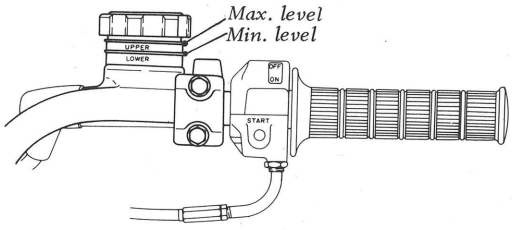
Check to be sure that the clutch cable has a play of about 4 mm as measured at the location indicated. Reposition the adjuster, as necessary, to secure this much play.



2-8-2. Brake lever and brake fluid

Grip the front brake lever to see if feels "spongy" or not. Any "spongy feel" means that some air is trapped in the fluid line and that the fluid line needs an air bleeding treatment.

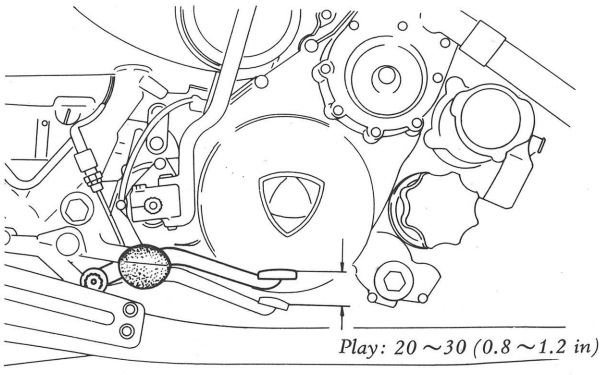
Check to be sure that the reservoir is full of brake fluid up to the maximum level mark; if not, replenish, using the same brake fluid (glycol base) as the one in the machine. The brake fluid in the machine conforms to the following specifications.



Brake fluid specifications	Where
DOT3 DOT4	U.S.A.
SAE J 1703a SAE J 1703b SAE J 1703c SAE 70R3 (obsolete spec.)	Elsewhere

2-8-3. Brake pedal

Adjust the brake pedal play to 20 ~ 30 mm (0.8 ~ 1.2 in), as necessary, by means of the brake rod adjuster, which is at the rear wheel brake panel.



SUZUKI MOTOR CO., LTD.

Printed in Japan
74.12 Ⓣ